

IN THE CLAIMS

1. (Canceled)

2. (Currently Amended) Receiver for detecting information symbols transmitted according to a CDMA technique, according to which CDMA technique the information symbols are spread with different spreading codes and scrambled with different scrambling codes, on the transmission side, the receiver comprising:

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according to claim 1, characterized in that a plurality of despreading units (44, 45) for despreading an input data bitstream with said different spreading codes, said input data being is provided and input data are supplied to the despreading units (44, 45) by means of a delay line (42, 43), and a set of k descrambling units (46, 47, 48, 49) per despreading unit (44, 45), k being an integer larger than 1, respectively k descrambling units (46, 47, 48, 49) being supplied with the output signal of one despreading unit (44, 45).

3. (Canceled)

4. (Canceled)

5. (Currently Amended) Receiver for detecting information symbols transmitted according to a CDMA technique, according to which CDMA technique the information symbols

are spread with different spreading codes and scrambled with different scrambling codes, on the transmission side, the receiver comprising:

at least one despreading unit (44, 45) for despreading an input data bitstream with said different spreading codes,

a set of k descrambling units (46, 47, 48, 49) per despreading unit (44, 45), k being an integer larger than 1, respectively k descrambling units (46, 47, 48, 49) being supplied with the output signal of one despreading unit (44, 45), and

a channel estimator (15) for generating channel estimation values,

~~according to claim 3, characterized in that it comprises multiplying circuits for multiplying data based on the output of a descrambling unit (46, 47, 48, 49) with the channel estimation values supplied from the channel estimator (15).~~

6. (Original) Receiver according to claim 5, characterized in that a plurality of RAKE combiner (52, 53) is provided being respectively supplied with the output of n multiplying circuits (51) associated with different despreading units (44, 45) but with descrambling units (46, 47, 48, 49) using the same descrambling code, wherein n is the number of RAKE taps and larger than 1.

7. (Original) Receiver according to claim 6, characterized in that a number k of RAKE combiner is provided, k being the number of different scrambling codes used per link and being larger than 1.

8. (Currently Amended) Mobile communications device, characterized in that it comprises a receiver according to claim ~~[[1]]~~ 2.

9. (Currently Amended) Mobile communications device, characterized in that it is a mobile station for a CDMA transmission system and comprises a receiver according to claim ~~[[1]]~~ 2.

10. (Canceled)

11. (Currently Amended) Method for detecting information symbols transmitted according to a CDMA technique, according to which CDMA technique the information symbols are spread with different spreading codes and scrambled with different scrambling codes, on the transmission side, the method comprising the following steps:

despreading (44, 45) an input data bitstream with said different spreading codes, said despreading including a plurality of steps, and said input data being supplied through a delay line, and

a set of k descrambling steps (46, 47, 48, 49) per despreading step (44, 45), k being an integer larger than 1, respectively k descrambling steps (46, 47, 48, 49) being supplied with the output of one despreading step (44, 45)

~~according to claim 10, characterized in that a plurality of despreading steps (44, 45) is provided and input data are supplied to the despreading steps (44, 45) after having been passed through a delay line (42, 43).~~

12. (Canceled)

13. (Canceled)

14. (Currently Amended) Method for detecting information symbols transmitted according to a CDMA technique, according to which CDMA technique the information symbols are spread with different spreading codes and scrambled with different scrambling codes, on the transmission side, the method comprising the following steps:

despreading (44, 45) an input data bitstream with said different spreading codes,
a set of k descrambling steps (46, 47, 48, 49) per despreading step (44, 45), k being an integer larger than 1, respectively k descrambling steps (46, 47, 48, 49) being supplied with the output of one despreading step (44, 45),

generating channel estimation values, and

~~according to claim 12, characterized by the step of multiplying data based on the output of a descrambling unit (46, 47, 48, 49) with the channel estimation values supplied from the channel estimation value generation step (15).~~

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15. (Original) Method according to claim 14, characterized by , a plurality of RAKE combining steps (52, 53) respectively supplied with the output of n multiplying steps (51) associated with different despreading steps (44, 45) but with descrambling steps (46, 47, 48, 49) using the same descrambling code, wherein n is the number of RAKE taps and larger than 1.

16. (Original) Method according to claim 15, characterized in that a number k of RAKE combining steps is provided, k being the number of different scrambling codes used per link and being larger than 1.
